No 118

49 Sansom St.

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An Essay Passed March 1828

On Ascites

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of Trenton NJ

For the degree of Doctor of Medicine

In the University of Pennsylvania

Presented on the 23d of January

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By most medical writers dropsy has been considered, as arising in every case from debility, and some authors of the present day, I presume, have been so swayed by their attachment to ideas imbibed during youth, that they still adhere to the old pathology of this disease.

On the above supposition, it was imagined that dropsy was produced either by too profuse an exhalation of the natural and proper lubricating fluid of the part, arising from debility in the terminating arteries, or the exhalents being healthy, from the corresponding absorbents being torpid or inactive, the fluid not being conveyed off, when it has answered every useful purpose, and thus accumulating formes dropsy.

Besides the above mentioned causes, the mechanical obstruction opposed to the venous circulation, by some diseased viscus (most frequently the liver) was believed to be a source of the disease, Though perhaps this state of things exists in some cases, it by no means does in the majority, such at least is the conclusion to be drawn,

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from the causes, symptoms, method of cure, and dissection of many cases of the disease.

There appears also to be some force in the objections to the supposition of debility in the exhalents, being the cause as urged by Dr Ayre, namely, either first, "That the fluid of dropsy may escape mechanically, ~~separated~~ from them, and that the fluid, thus mechanically separated may be identified in its sensible and chemical qualities with another fluid which is confessedly secreted: or secondly, that if the fluid of dropsy be secreted, then an increase in the quantity, of a secretion may continue an indefinite period, under a decrease in the energy, of its secreting vessels." such a condition being irrecon=cilable, with experience and analogy.

With regard to debility of the absorbents being the cause of dropsy, it seems in some degree to be contradicted, by the emaciation which frequently takes place in the disease, also that the specific effect of mercury can be obtained as readily as in other

conditions of the system.

Great stress has been laid upon mechanical obstruction of the venous circulation, as productive of dropsy, and the experiment of Lower, viz that of tying the vena cava of a dog, has by some been deemed conclusive; but the inflammation caused by the injury done to the surrounding parts, may have caused effusion, and not the mere mechanical obstruction:

Perhaps in the human subject, in cases of an enlar=ged viscus, the liver for instance, the irritation caused by it, may be propagated to the serous membrane causing a slight inflammation productive of effusion, but as to the mere obstruction of blood by an enlarged viscus, causing serous effusion, seems improbable, for a case has occurred, "in which the vena cava was found completely obliterated as a tube, from the point immediately below where the venae hepaticae united to it, downwards to its bifurcation, without there occuring any watery effusion, in any part of the body".

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Having mentioned cursorily some of the leading objections to the old hypothesis, we shall now state the arguments, derived from a consideration of the causes symptoms, method of cure, and dissections, in support of the idea that a low degree of inflammation in the serous tissues, is the essential cause of dropsy.

First of the causes amongst these Scarlatina seems to be one, for we frequently find anasarca supervening an attack, which dropsy is probably caused either by irritating the skin, or by taking cold and the primary acute inflammation having changed into a subacute, which state we know frequently causes effusion, at any rate what ever is the cause it does not seem to be debility. For Dr Blackall observes "The time the symp=toms, and subject of this attack, by no means permit the opinion that it originates in mere debility."

Another cause is the abuse of mercury, this medicine when injudiciously exhibited, we know to excite an action injurious to health, and this action appears

to be of an inflammatory kind, Malthus considers it as being highly so and saying, that the blood is found buffed in a high degree asserts that venesection is the best remedy for profuse salivation:

With regard to the symptoms, the effusion itself being considered merely as an effect and not the disease, we are not to seek in it many signs and evidences of inflammation, some however do occur, First the effusion has been found opaque, with portions of lymph in it, and in one case Dr Blackall says. "The fluid of the cellular membrane coagulated spontaneously." These appearances agree with what Bichat describes as existing in fluids produced by chronic inflammation of serous membranes, he says, "they are seldom pure almost always troubled lactescent &c."

The urine offers more for our consideration on this point; it has been found to be more or less coagulable in proportion to the degree of action, which the system at large manifests; on this point Dr Blackall is very

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explicit. His words are. "That when the urine is most loaded, it coagulates by the lowest heat, and most firmly, The blood is likewise most buffy, and the whole system bears the greatest marks of inflamma=tion".

With regard to the remedial means we find those most useful that are fitted to combat an inflammatory diathesis; such at least is the conclusion to be drawn from Dr Blackall when he says, "attempts at cure must prove abortive, unless in selecting hydragogue medicines, those are prefered, which are likewise calculated to reduce inflammation". Thus impres=sed he frequently prescribed venesection, and observes that he never had reason to regret its use.

The evidence of Dr Ayre upon this point is strong, He commences the treatment of this disease by bloodlet=ting, both topical and general, being guided by the symptoms.

The operation of blisters when applied to

anasarcous legs has generally been found injurious, as sloughing sores are the consequence, such is precisely the effect to be expected from irritating, a tissue already inflamed. Whereas if the cellular tissue was in a state of debility as generally supposed, the effect would then be similar to that produced by the application of blisters to parts about to become gangrenous, namely to prevent the extinction of vitality.

Purgatives another portion of the antiphlogistic course, are of incalculable service in dropsy. Though objected to by some as apt to excite febrile symptoms and irritating the alimentary canal, and that it is generally the consequence of purging, that if unsuccessful, the complaint is increased, and debility of the digestive organs is induced. Yet notwithstanding these grounds of alarm, when the habit is unirritable and free from gout, and the dropsy extensive, without fever or local determina =

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=tion. They are generally operating safe and are pro=
=ductive of considerable effect."

With regard to diuretics, so long considered as the specifics for dropsy, medical confidence has perhaps somewhat declined: at least the reliance that Med=
=ical men formerly felt, in the powers of diuretic Medicines being able to disperse dropsical effusion, experience has proved to be false, But this want of success arises from mis application of the different artic=
=les belonging to this class of remedies; many of the diuret=
=ics are stimulating, and if exhibited in inflammatory dropsy will do harm; while others that diminish inflammatory action are very useful; This may account for the various reputation which articles of this class have sustained at different times.

Having thus given a summary account of the pathology of dropsy, I shall now offer a few remarks on that preternatural collection of water in the abdomen which is called Ascites. The water most commonly is situated in the cavity of the peritoneum, but in some instances it is found between the peritoneum and abdominal muscles, whe in this situation it is call=ed encysted dropsy.

Ascites is of Greek derivation, from ασκος a sack, from its sack like protuberance.

Although the approach of this disease is attended by most of the symptoms, which denote the hydropic diathesis, together with swelling and fluctuation of the abdomen, It is sometimes clothed in so much obscurity as to render its diagnosis somewhat difficult, and it has even been confounded with tympanites, and the tumor of pregnancy. To prevent such mistakes we ought to pay strict attention to the symptoms of the disease, which are the following.

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Ascites usually commences with symptoms which denote the hydropic diathesis, which are, diminished secretion of urine, thirst, swelling of the feet and ancles, and a peculiar expression of countenance which is called leucophlegmatic. There is a small protuberance in the hypogastric region which gradually extends upwards over the whole abdomen, which becomes tumefied and hard, the countenance becomes pale and bloated, is cachectic, and the respiration is affected. Constipation exists in every stage of the disease. The urine is scanty and high coloured. The pulse is febrile though small and corded, the skin is hot and dry, and there is great thirst. In the mean time the accumulation of water continues to increase, at this time a distinct fluctuation is very evident. It may be ascertained by a careful examination. The mode which Professor Chapman recommends it to be done is the following. By placing the hand on one side of the abdomen,

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and striking the opposite with the other, In this way the water may be distinctly felt. The symptoms now become more aggravated there is great torpor and heaviness, with an obscure fever, the distension is enormous, and the patient sinks under a slow hectic.

The causes of Ascites may be treated of under two heads, viz. Symptomatic and idiopathic, When it is induced symptomatically the cause will be found to exist in the morbid affections of some of the viscera, as the liver spleen &c. The disease is caused in this case not by the mere obstruction occa=sioned by an enlarged viscus, but from the infla=mation existing in the diseased organ affecting the peritoneal coat. Dr Ayre is very explicit upon this when he says "nor does the serous discharge always take place in every case where these organs are morbid=ly affected, but only where the peritoneal covering participates in their disease; for the chronic inflammation in those cases, where it occasions

ascites, does so by extending from the cellular tissue of the internal structure of the organ, to the serous tissue investing it; and from thence as from a point; it spreads with varying degrees of rapidity through the whole of the peritoneal investure".

Ascites may also be induced by some preceding disease as intermittent fever, rheumatism &c. When it exists as an idiopathic affection, it may be induced by any of the causes of inflammation, as heat or cold, sudden changes of weather, check of perspiration, suppression of any accustomed evacuation as haemorrhoids &c. Professor Chapman is of the opinion that it occasionally arises in a manner, which no medical writer has heretofore noticed, that is by the secretion and condensation of a gas.

Examinations of persons who have died in this disease exhibit the following phenomena", The liver is found hard and tuberculated, the peritoneum thickened and inflamed, the stomach and bowels diseased, the

kidneys, spleen and pancreas in a morbid condition, the mesenteric glands are often found indurated, the effused fluid is found varied in character and consistence.

The first indication which presents itself for our consideration in the treatment of this disease, is to change that morbid condition of the system which produces the effusion. The remedy best adapted to fulfill the above indication, is bloodletting either local or general, Dr Ayre prefers the former, he says "Topical bleeding when properly conducted, has the advantage of acting only slightly on the general strength, and very considerably on the local disease". Combined with local general bleeding is sometimes indispensably necessary in persons of plethoric habit or were febrile symptoms exist, indicated by a tense, hard and corded pulse, with sizy blood, a hot and dry skin, a parched tongue, difficult respiration, thirst and other inflammatory

symptoms.

Having pushed this part of the depleting plan of treatment to some extent, we will find that the auxiliary remedies are more efficacious.

At this stage of the disease purgatives become of in=calculable benefit, They should be administered in such a manner if possible, as to keep up a constant drain from the bowels, of the numerous combinations of medicines of this class, which have been extoled, as possessing peculiar powers in evacuating the effused fluid in abdominal dropsy, Professor Chapman prefers the following, Cremor tartar ℥i Jalap xx or xxv gr.

We are often prevented by the presence of diarrhoea from deriving full benefit from the purgative plan of treatment, when this is the case we must resort to diuretics, they are important remedies in this disease, but their operation is rather palliative than otherwise, as they merely evacuate the fluid without correcting the morbid action on which the effusion depends.

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If we wish to obtain the full effect of this class of remedies we ought to keep in view, certain rules which are necessary in the proper administration of them. viz While the patient is taking a diuretic he should be kept cool and as much out of bed as possible, he should be allowed a moderate quantity of drink, as it assists the operation of the diuretic, and allays that distressing thirst which is present in this disease, and which aggravates all the unpleasant symptoms, The best drink is water acidulated to the patients, a decoction of Juniper berries &c.

The best of the diuretics are those which produce large watery evacuations from the kidneys. Dr Ayre prefers the powder of dried squill and digitalis in very minute doses, assisted by ½ gr. of calomel taken at night and allowing the patient to drink freely of an infusion of dandelion, or a solution of Cremor Tartar.

If all our remedies fail in evacuating the water we must resort to tapping, especially if the distension

produces much pain, as great relief is obtained and the system becomes more susceptible to our remedies.